

Fig. 1

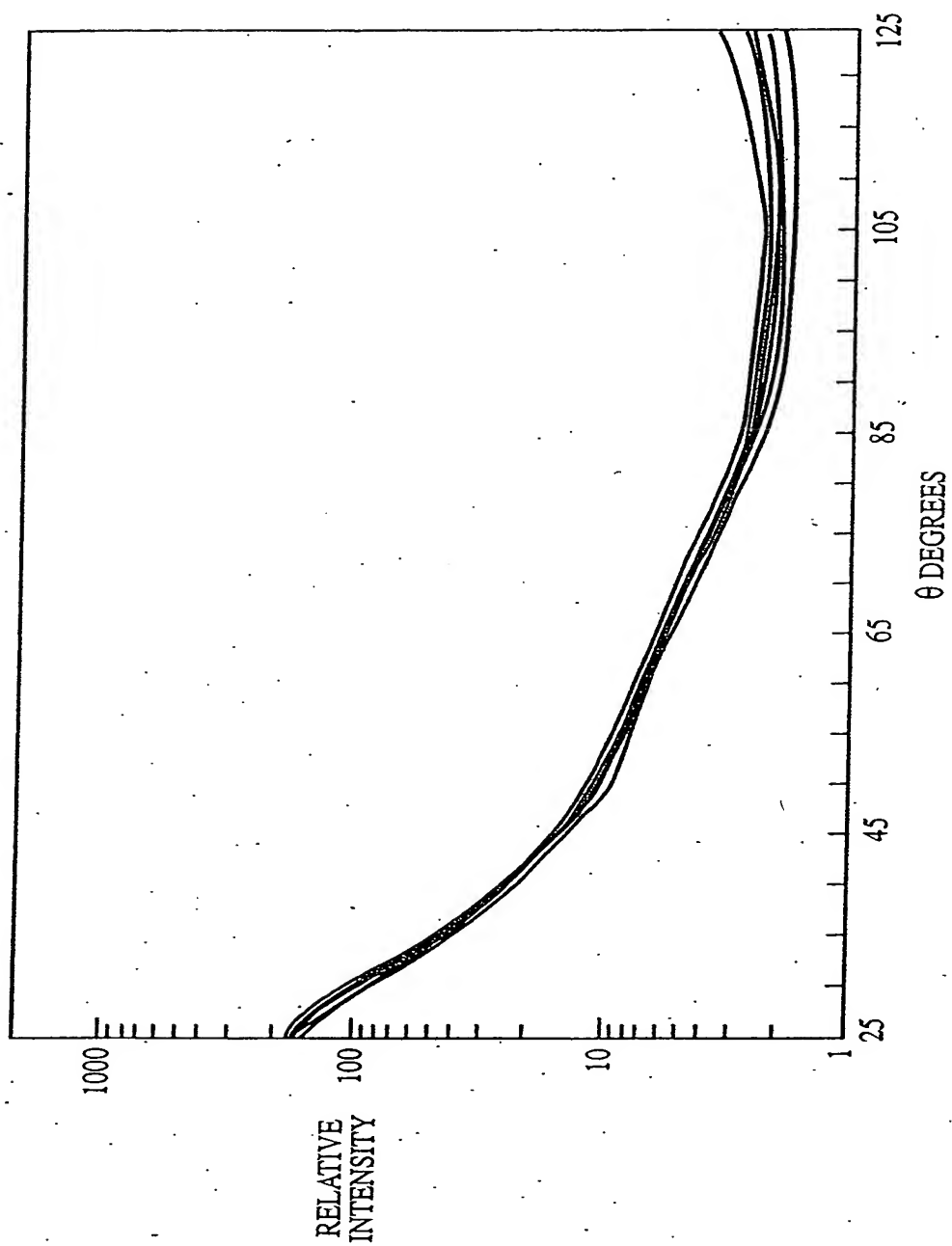


Fig. 2

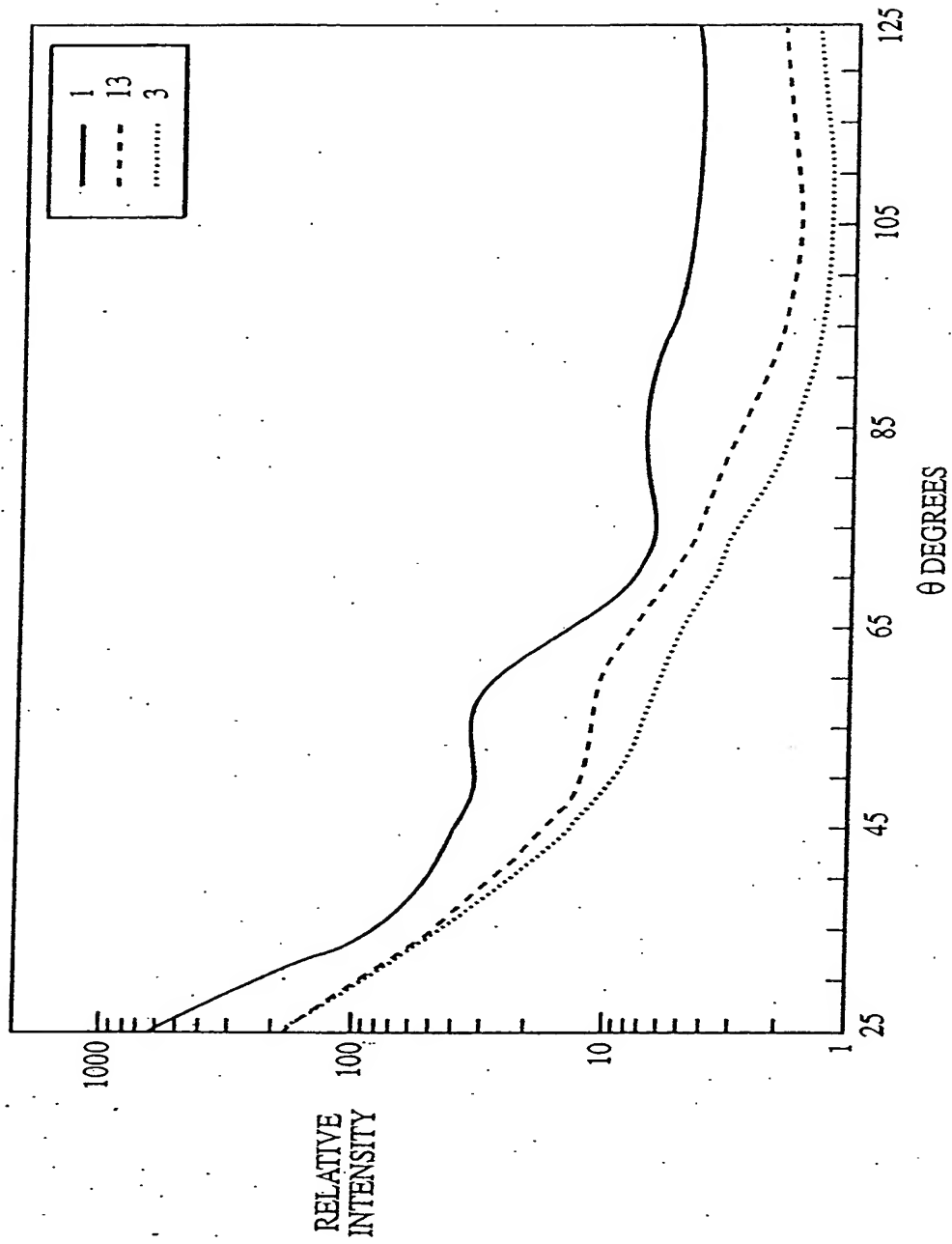


Fig. 3

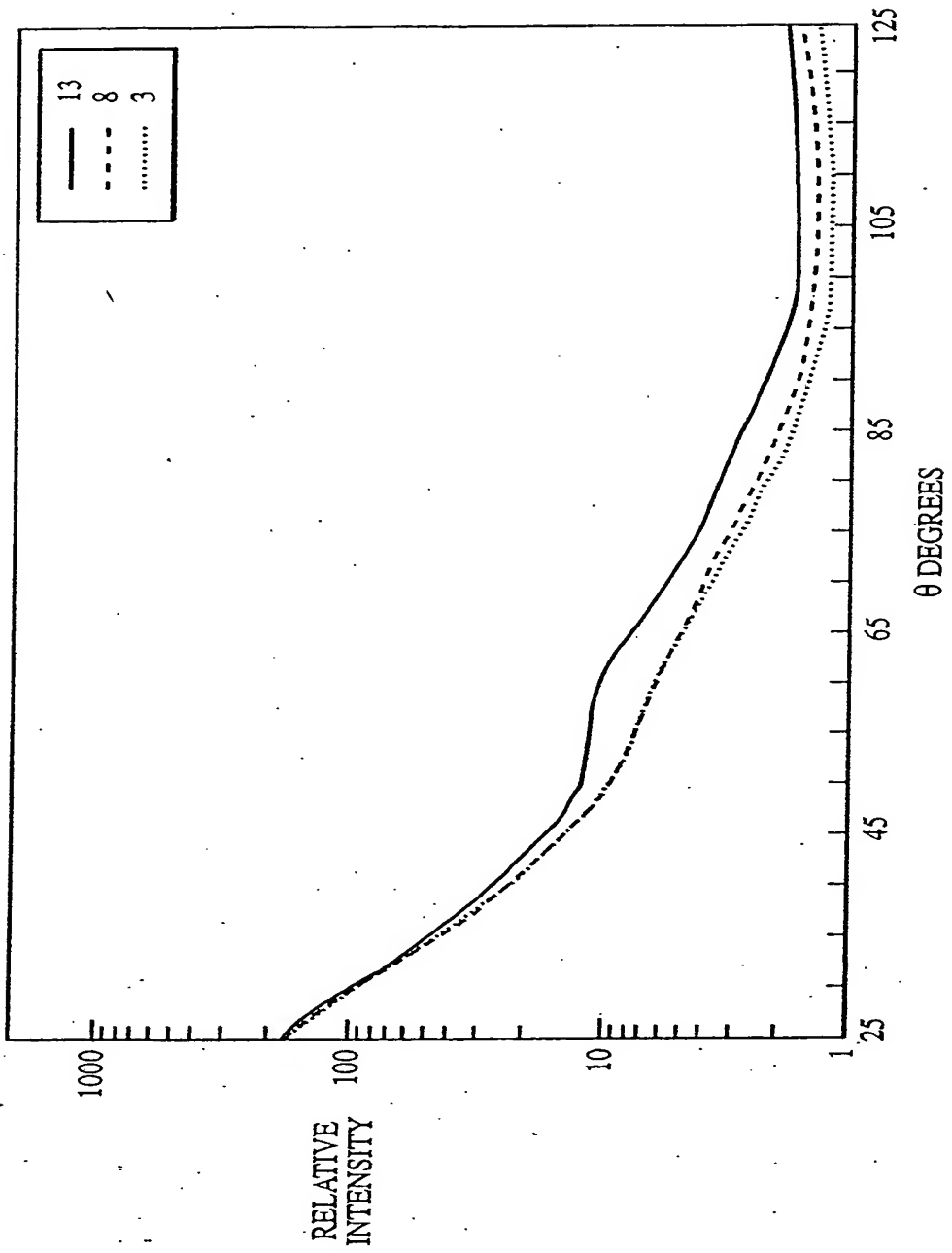


Fig. 4

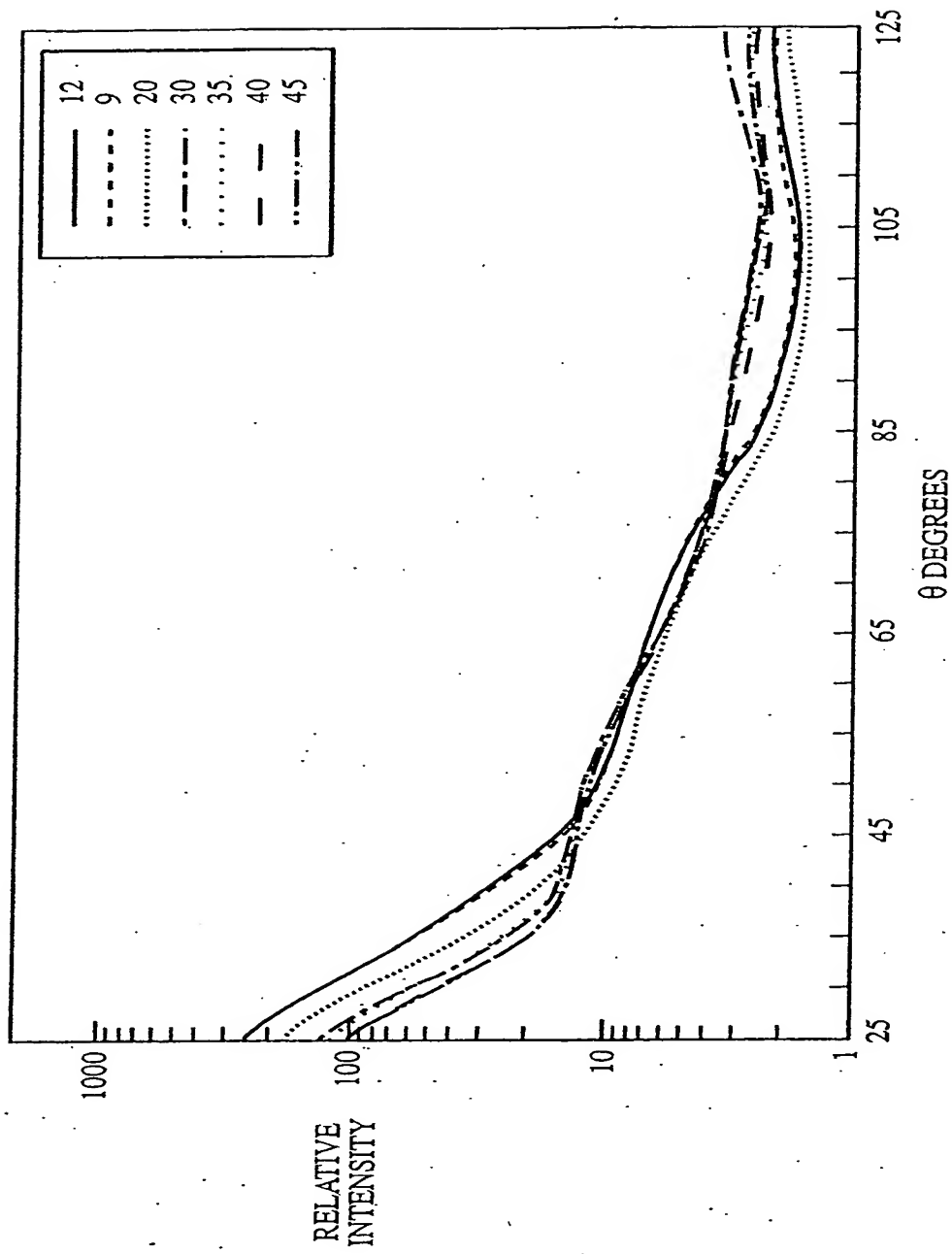


Fig. 5

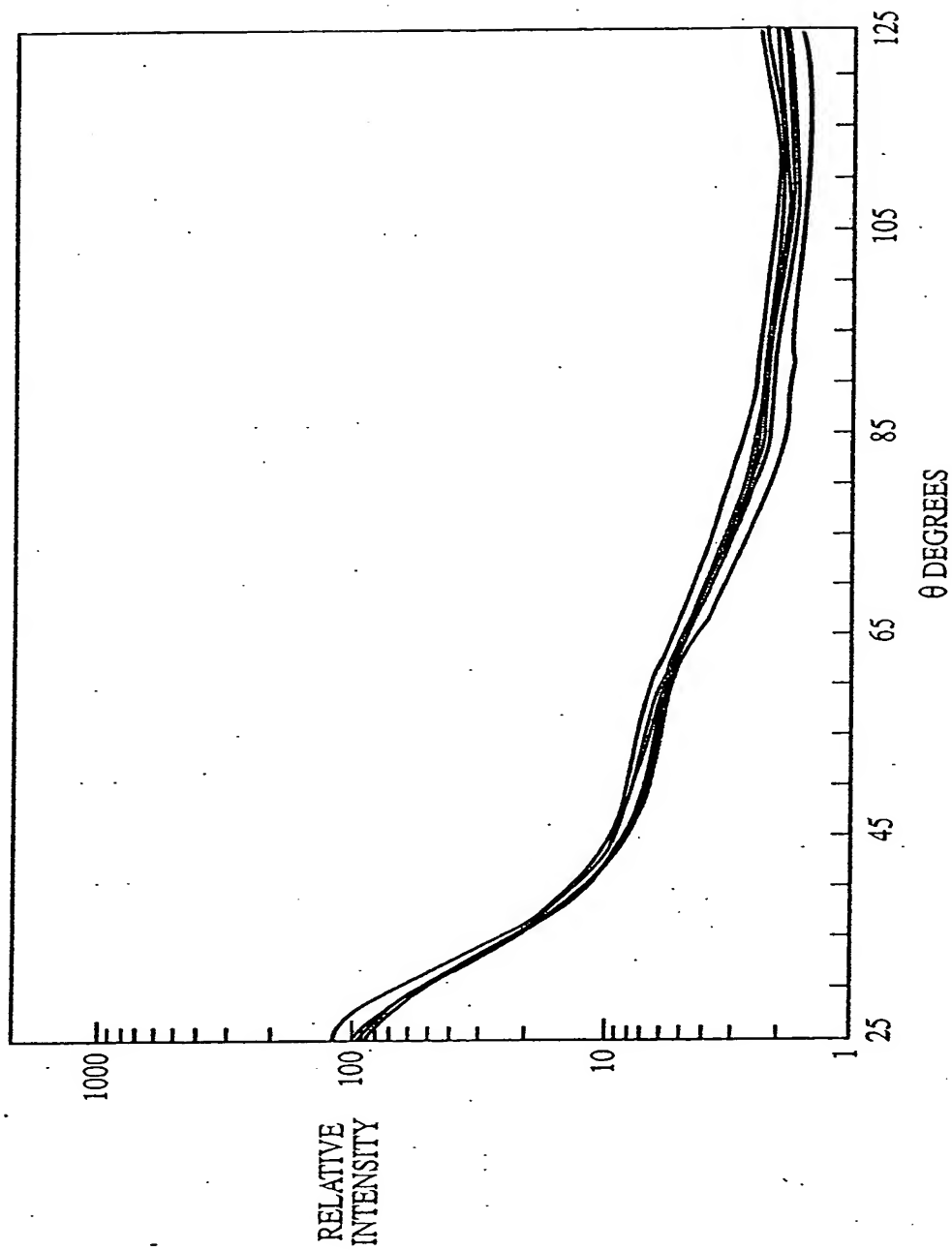


Fig. 6

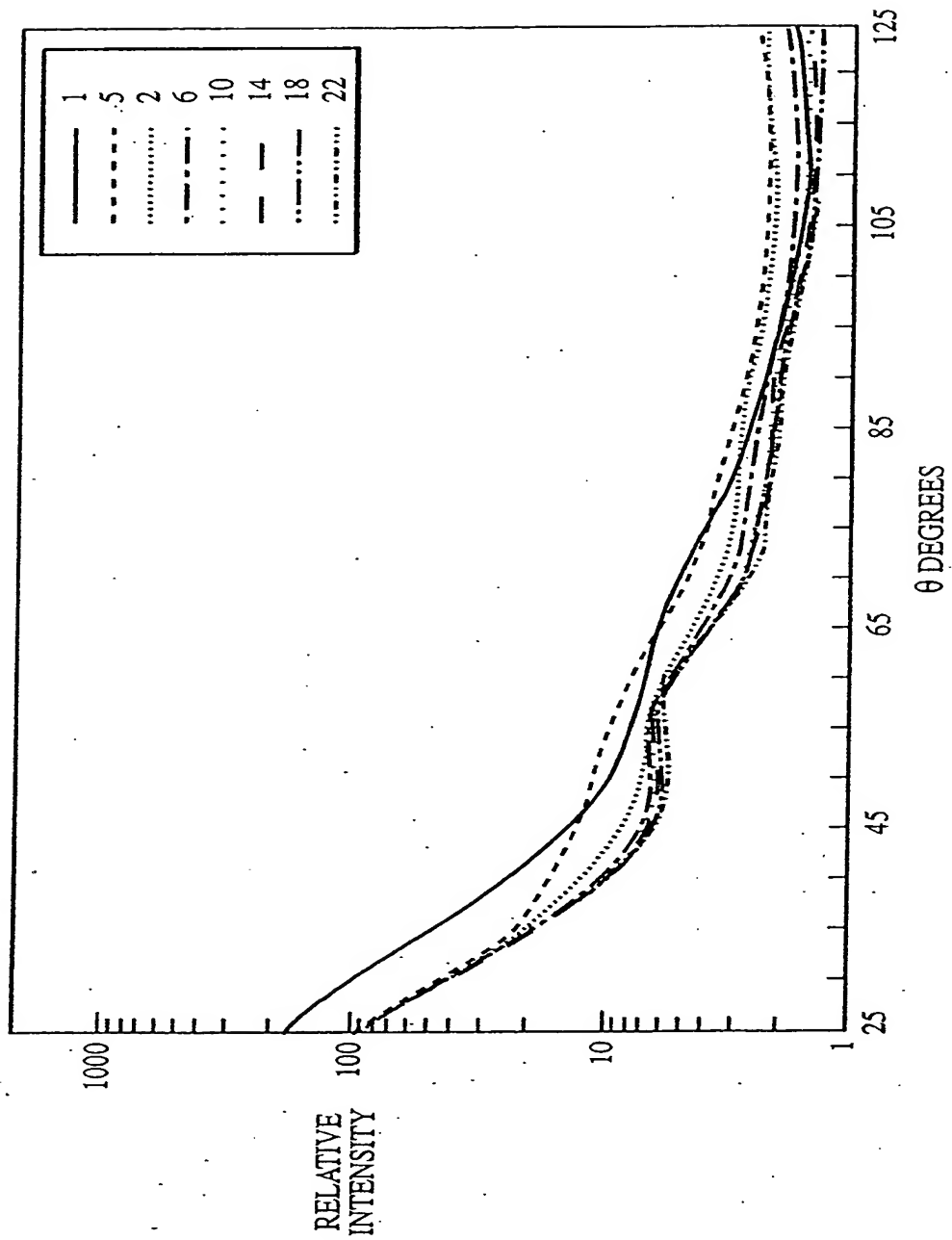


Fig. 7

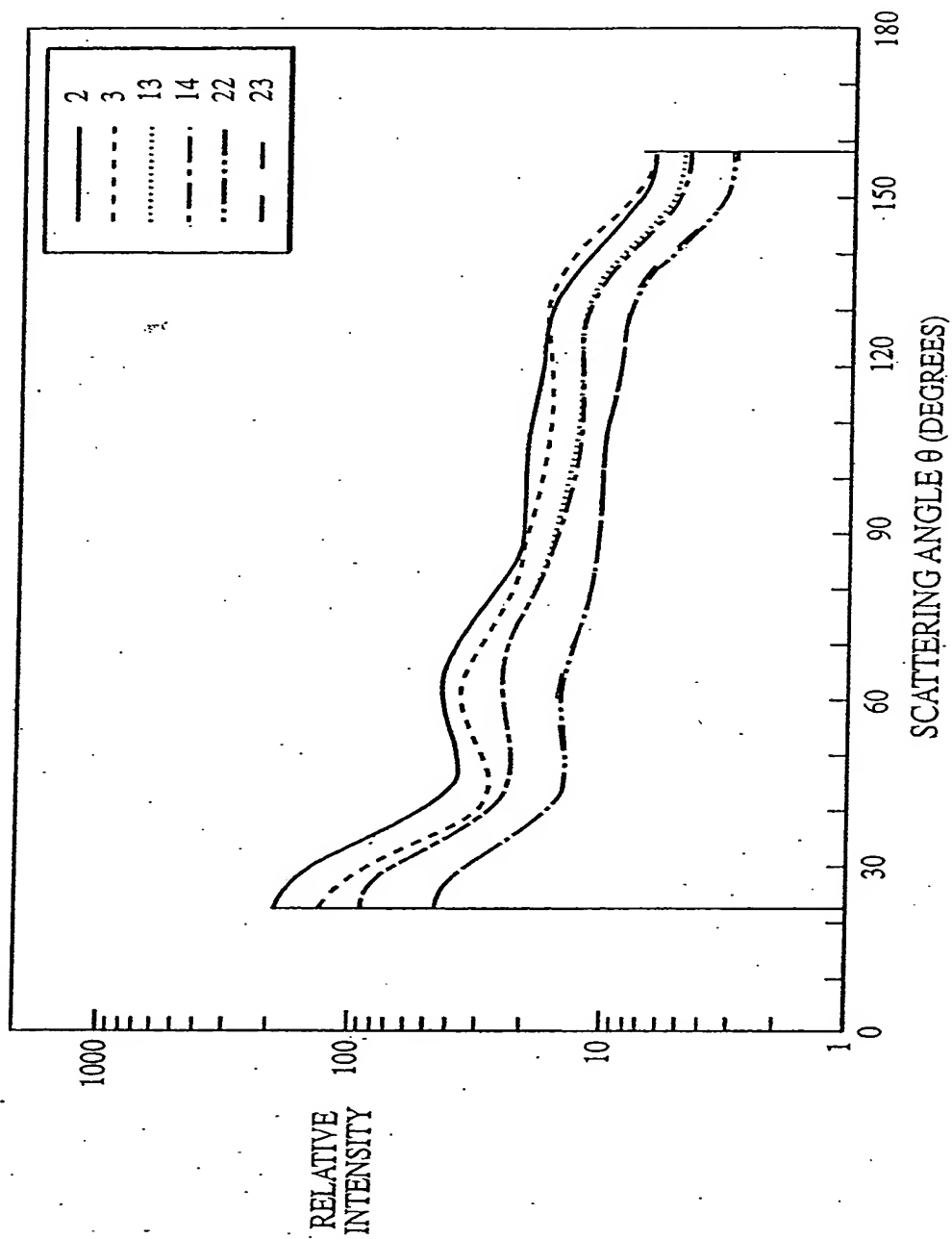


Fig. 8A

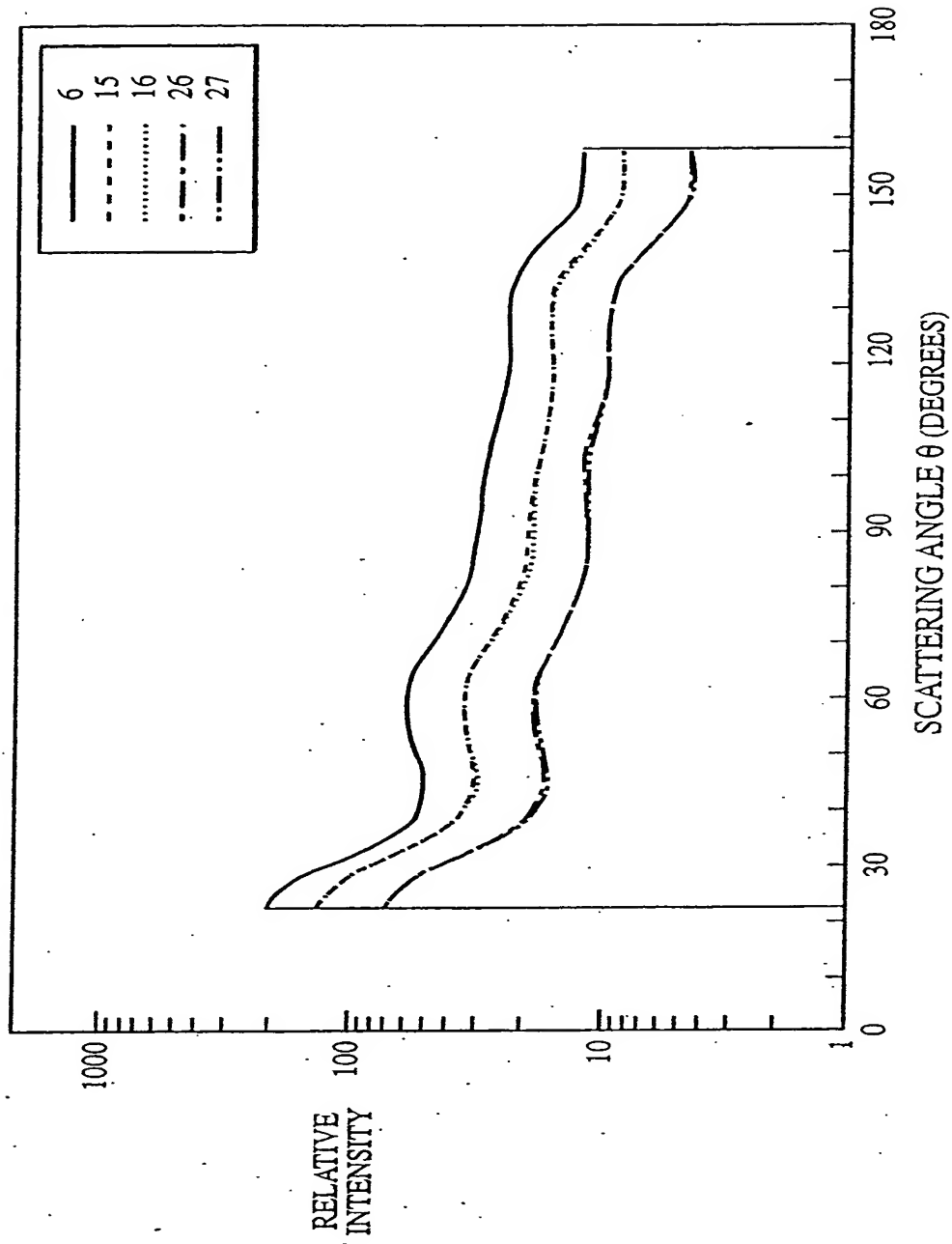


Fig. 8B

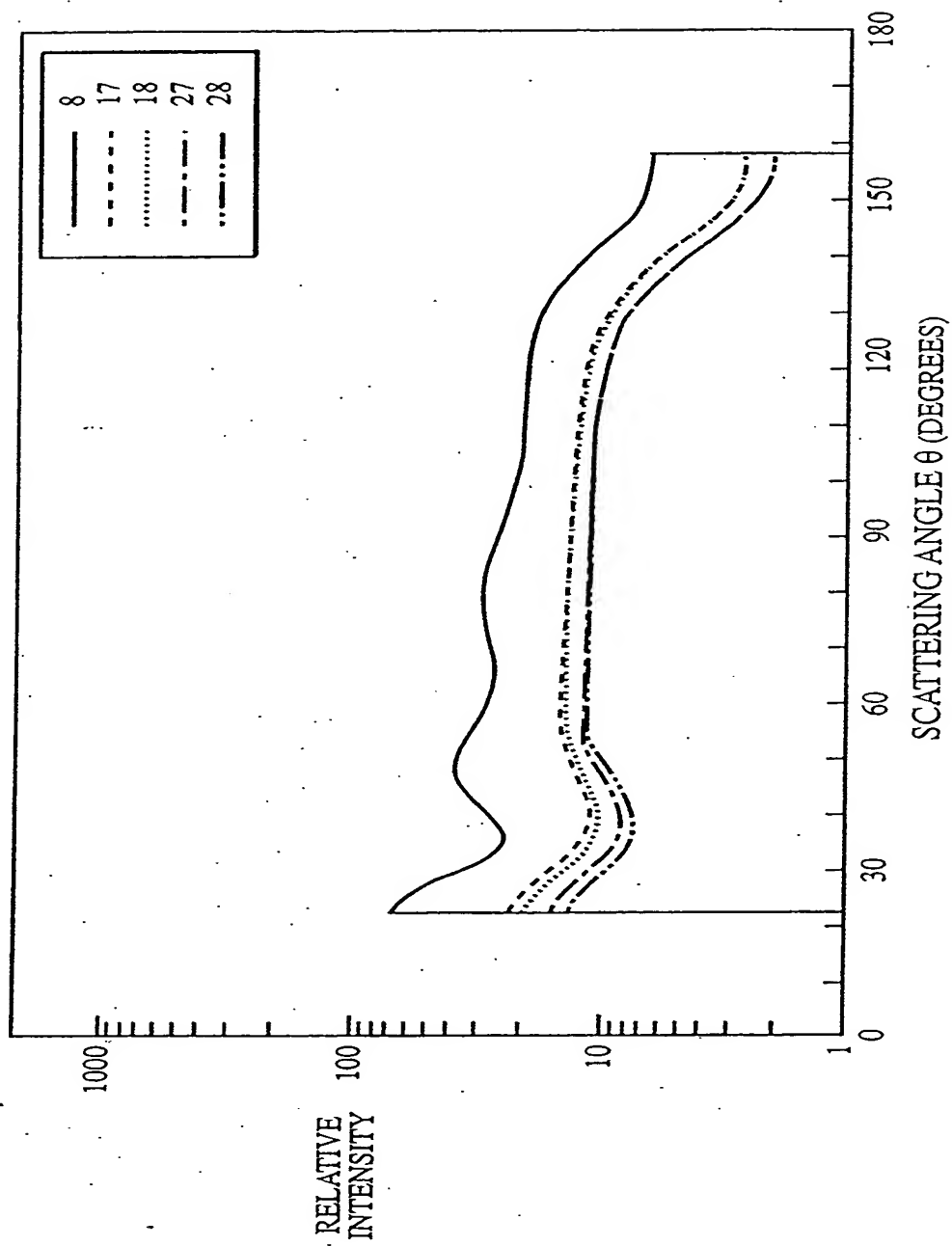


Fig. 8C

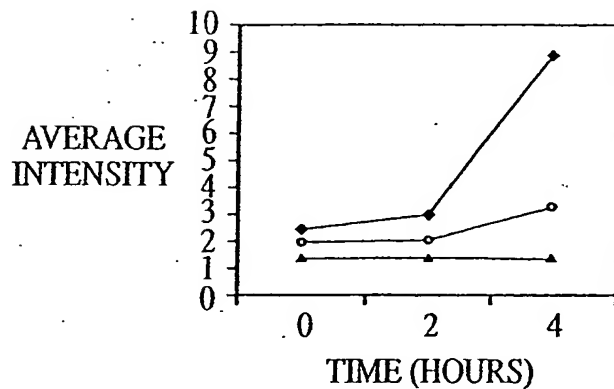


Fig. 9A

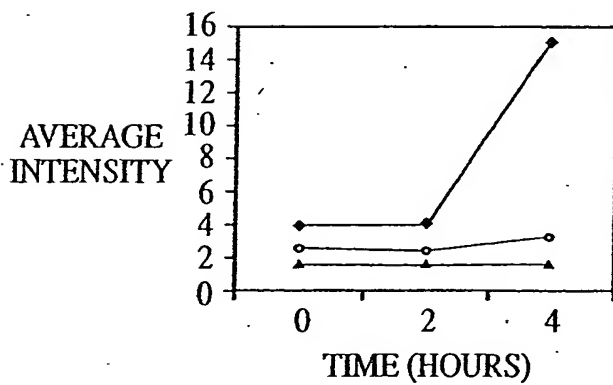


Fig. 9B

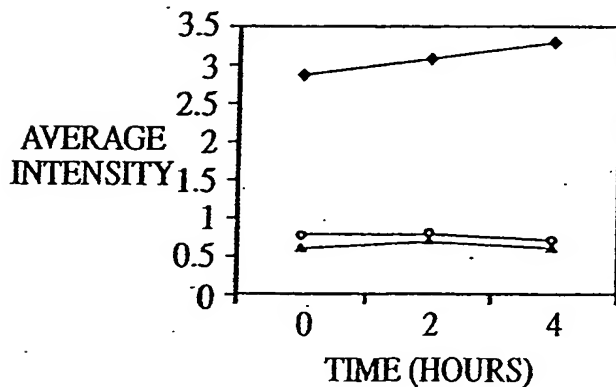


Fig. 9C

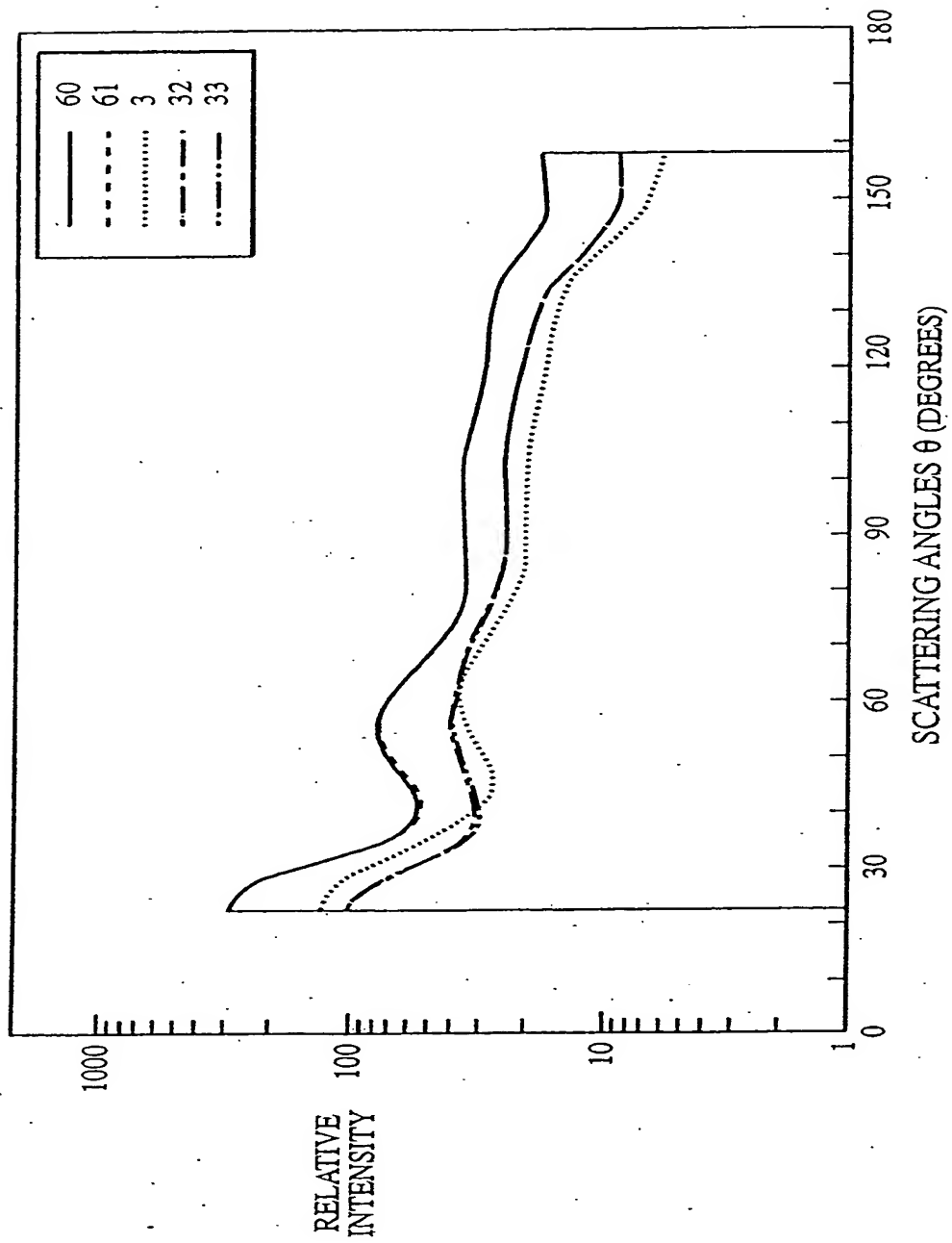


Fig. 10

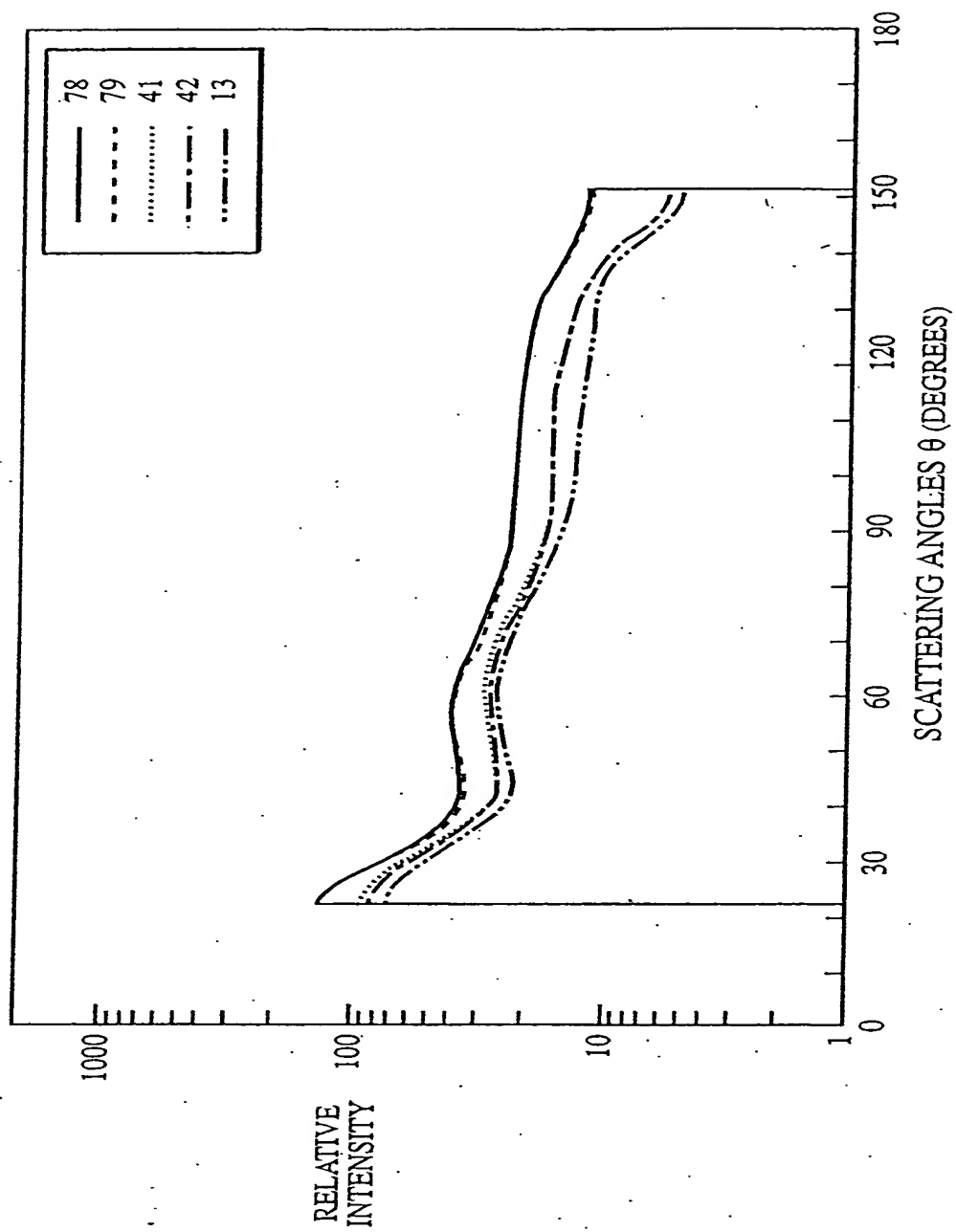


Fig. 11

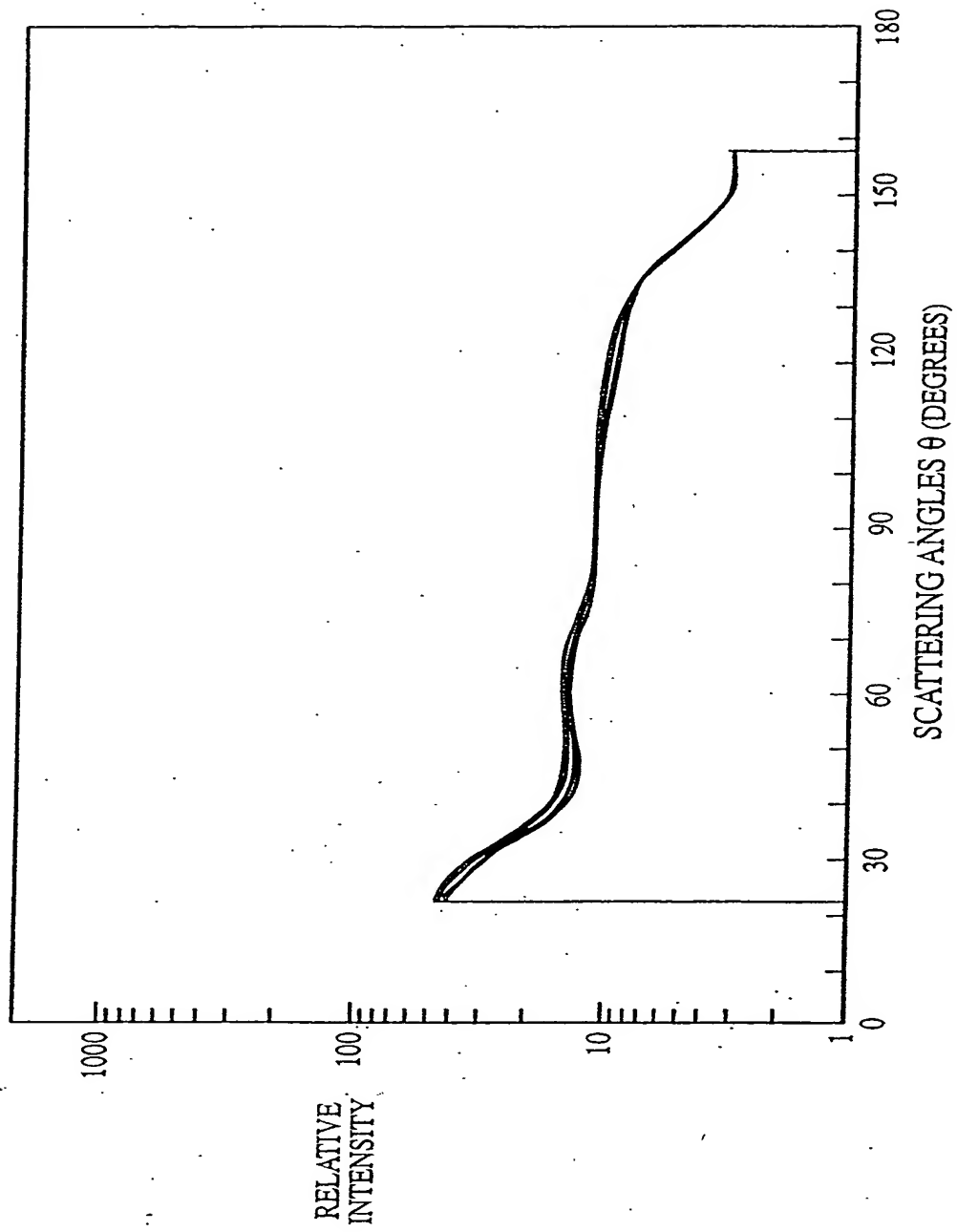


Fig. 12

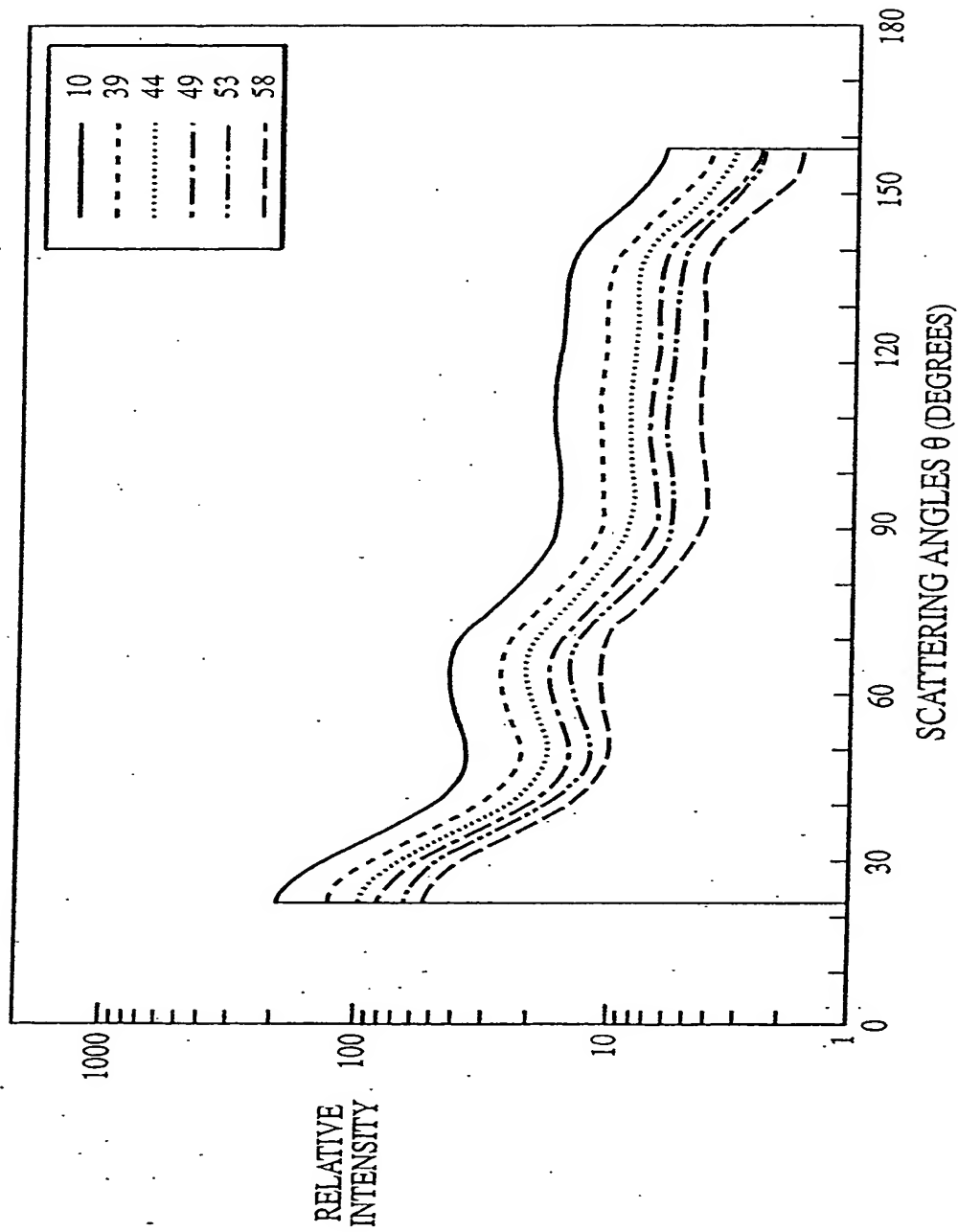


Fig. 13

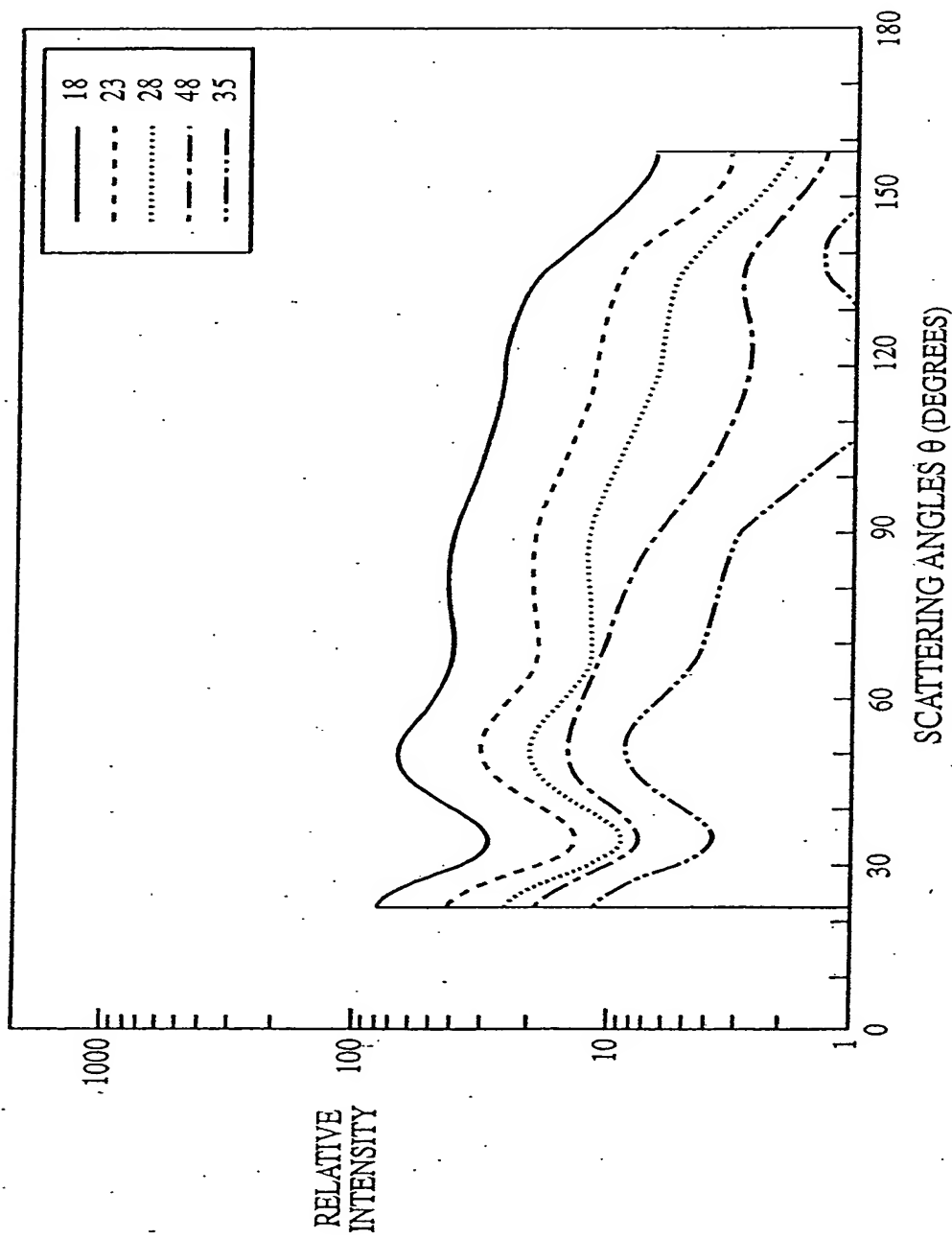


Fig. 14

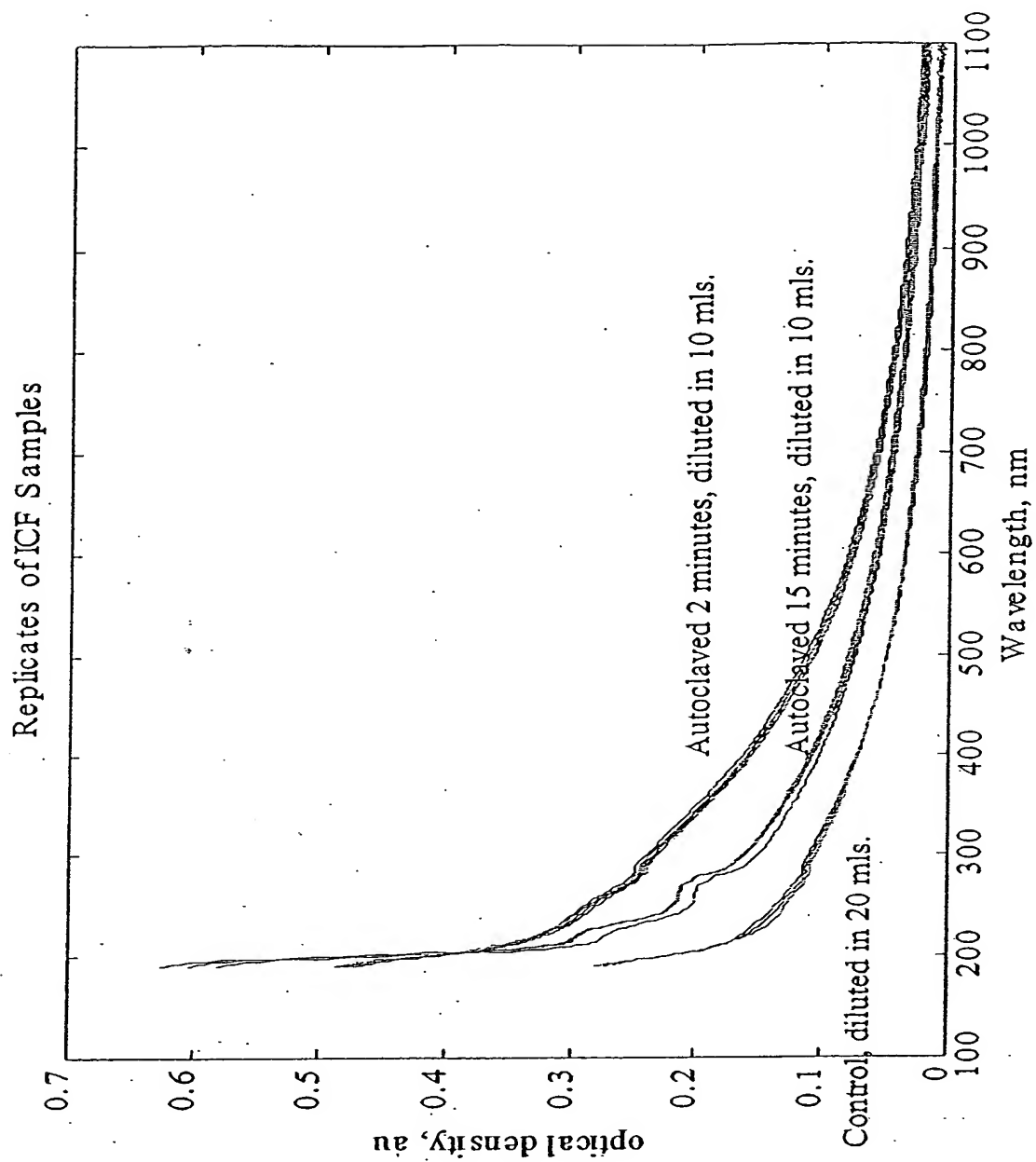


Fig. 15

| RESULTS PROBLEM No: | Time 2 hours |
|-----------------------------------|---------------------------------|
| ESTIMATES FOR A SINGLE POPULATION | |
| Mie Average Diameter (cm) | = 2.570334E-04 +/- 3.302753E-05 |
| Concentration (g/mL) meas. | = 2.028209E-06 |
| Concentration (g/mL) calc. | = 2.028209E-06 +/- 2.261741E-07 |
| Particle No (#/mL) | = 228110.500000 |
| Residual sum of squares | = 5.012901E-05 |
| Res. sum of squares (Norm) | = 2.879399E-01 |
| Standard Dev. (Residuals) | = 3.019001E-04 |
| Standard Dev. (Norm. Res) | = 2.288071E-02 |
| RESULTS PROBLEM No: | Time 4 hours |
| ESTIMATES FOR A SINGLE POPULATION | |
| Mie Average Diameter (cm) | = 1.969644E-04 +/- 1.826982E-06 |
| Concentration (g/mL) meas. | = 3.055250E-05 |
| Concentration (g/mL) calc. | = 3.055250E-05 +/- 2.933861E-07 |
| Particle No (#/mL) | = 7636334.000000 |
| Residual sum of squares | = 5.679470E-03 |
| Res. sum of squares (Norm) | = 2.113989E-01 |
| Standard Dev. (Residuals) | = 3.213458E-03 |
| Standard Dev. (Norm. Res) | = 1.960514E-02 |
| RESULTS PROBLEM No: | Time 3 hours |
| ESTIMATES FOR A SINGLE POPULATION | |
| Mie Average Diameter (cm) | = 2.672413E-04 +/- 7.599205E-06 |
| Concentration (g/mL) meas. | = 9.346907E-06 |
| Concentration (g/mL) calc. | = 9.346907E-06 +/- 2.200983E-07 |
| Particle No (#/mL) | = 935316.800000 |
| Residual sum of squares | = 2.789136E-03 |
| Res. sum of squares (Norm) | = 7.187017E-01 |
| Standard Dev. (Residuals) | = 2.251923E-03 |
| Standard Dev. (Norm. Res) | = 3.614872E-02 |
| RESULTS PROBLEM No: | Time 5 hours |
| ESTIMATES FOR A SINGLE POPULATION | |
| Mie Average Diameter (cm) | = 1.405828E-04 +/- 1.859756E-06 |
| Concentration (g/mL) meas. | = 2.712445E-05 |
| Concentration (g/mL) calc. | = 2.712445E-05 +/- 4.164035E-07 |
| Particle No (#/mL) | = 1.864516E+07 |
| Residual sum of squares | = 9.585535E-04 |
| Res. sum of squares (Norm) | = 8.134952E-02 |
| Standard Dev. (Residuals) | = 1.320161E-03 |
| Standard Dev. (Norm. Res) | = 1.216175E-02 |

Fig. 16

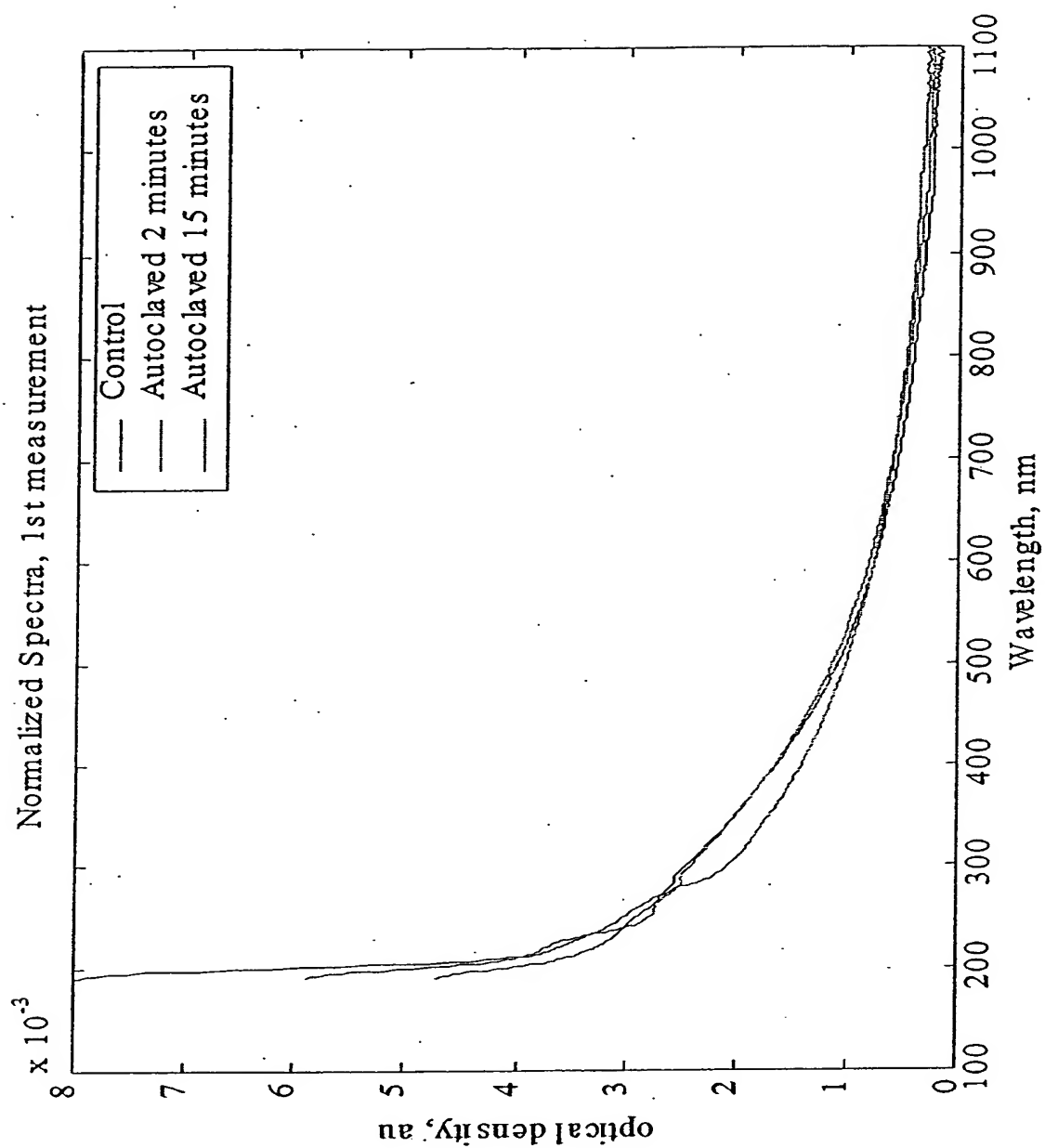


Fig. 17

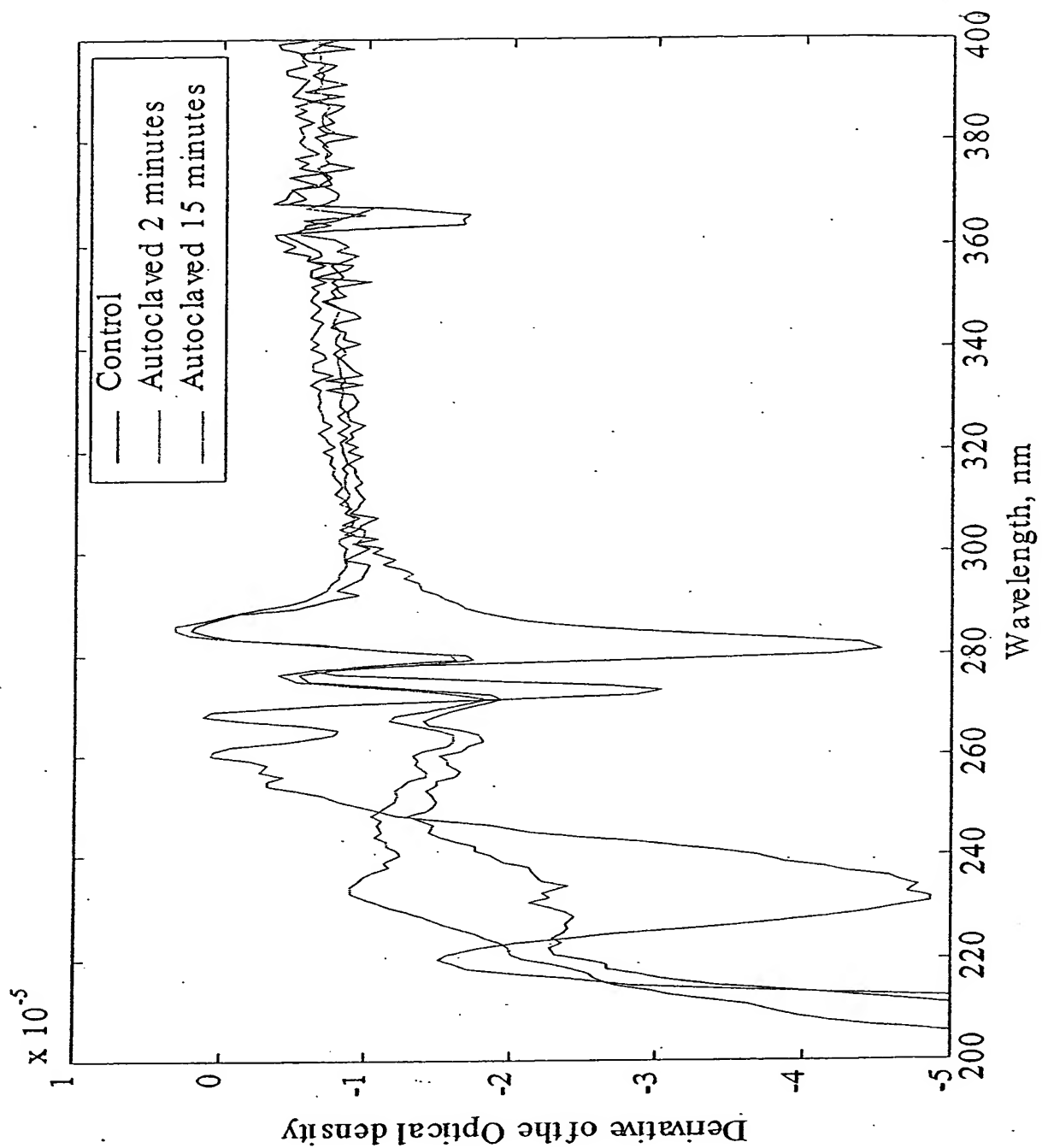


Fig. 18

Fractionation Curve of *B. subtilis* in 0.42% NaCl Solution

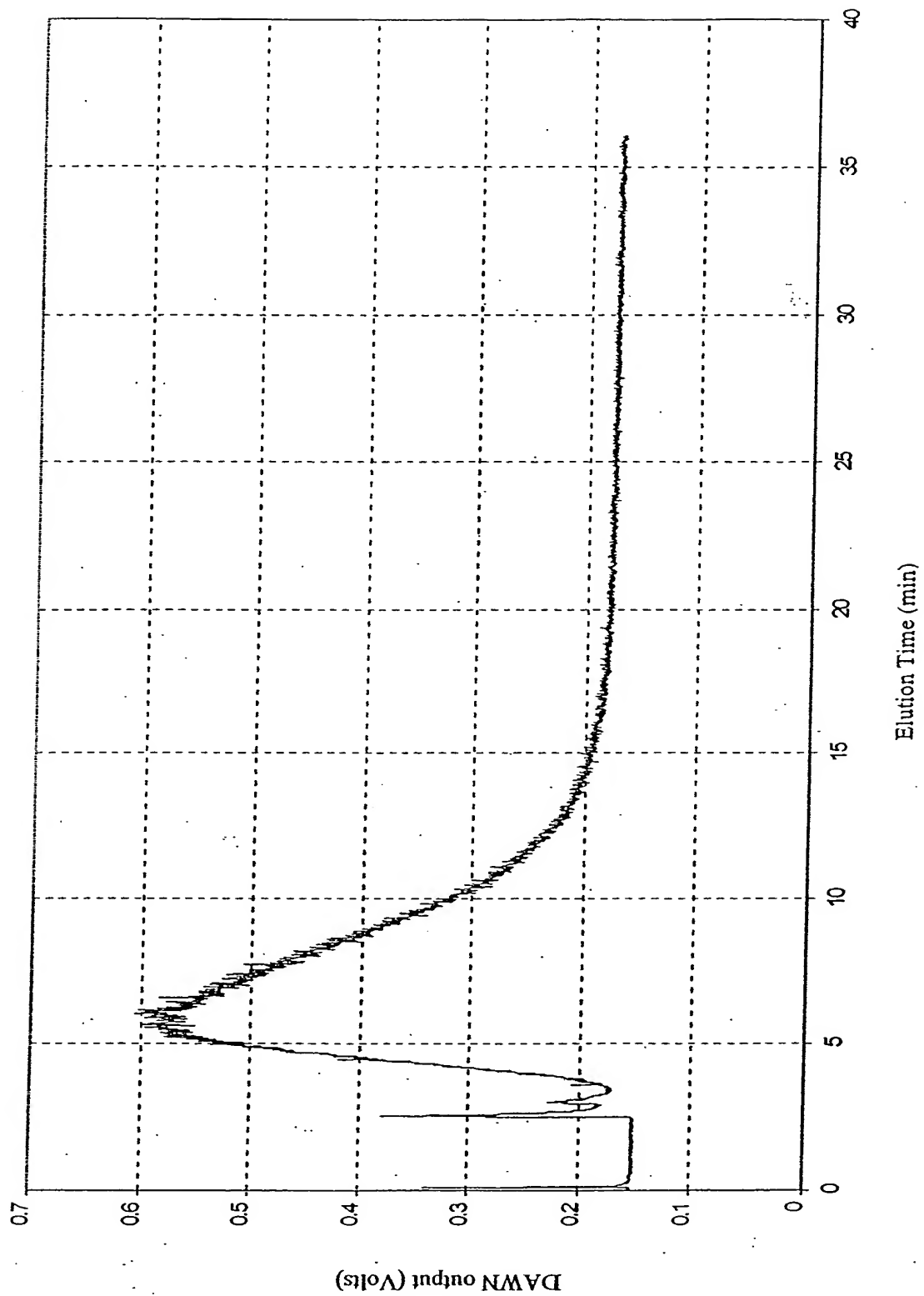


Fig. 19

Rayleigh Ratio vs. Angles from DAWN -- B.subtilis

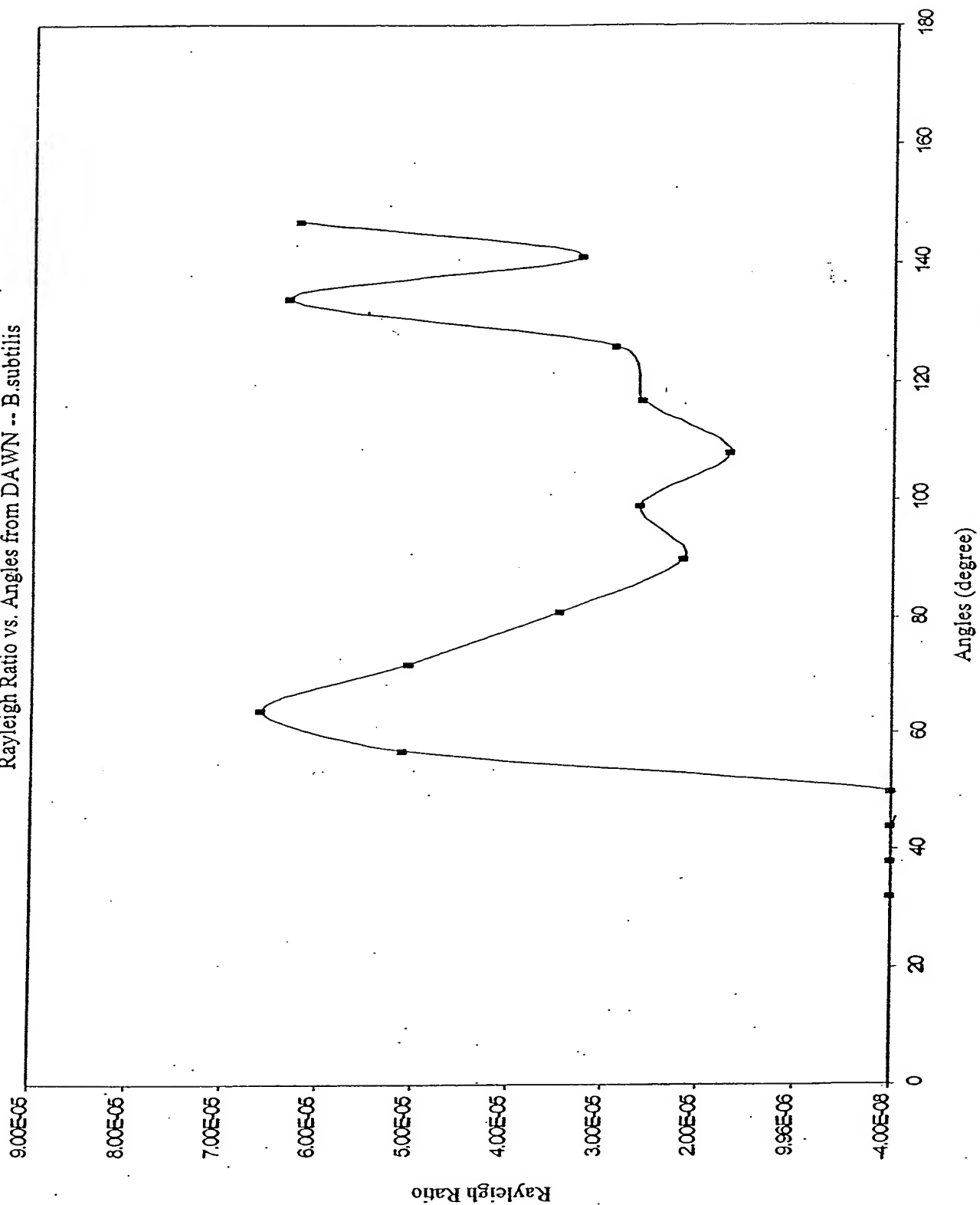


Fig. 20

Polar plot of *B. globigii*

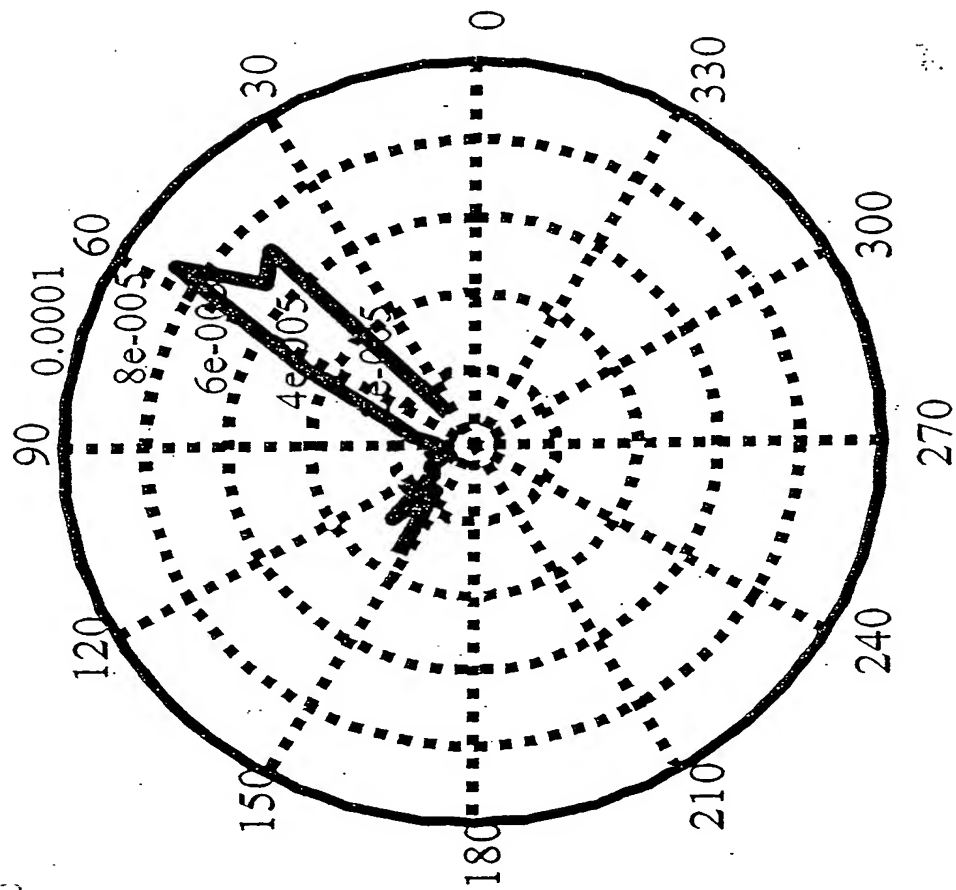


Fig. 21

Polar plot of *B. subtilis*

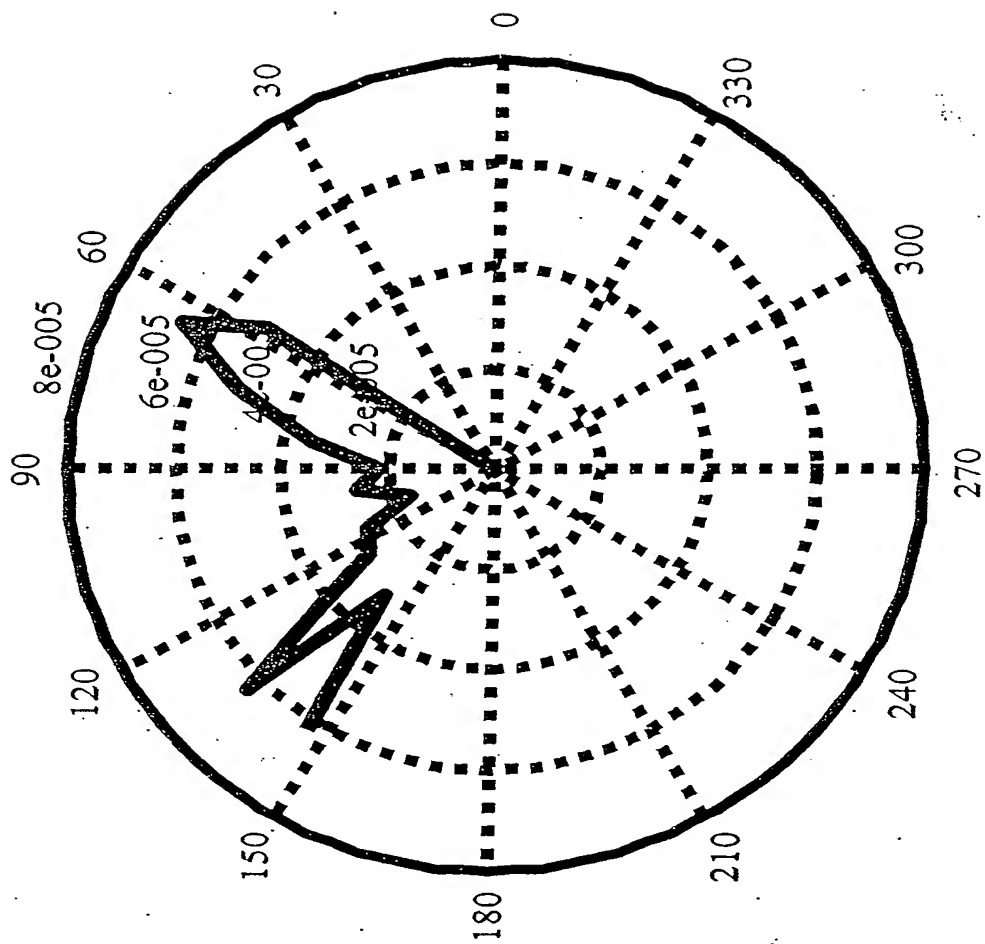


Fig. 22

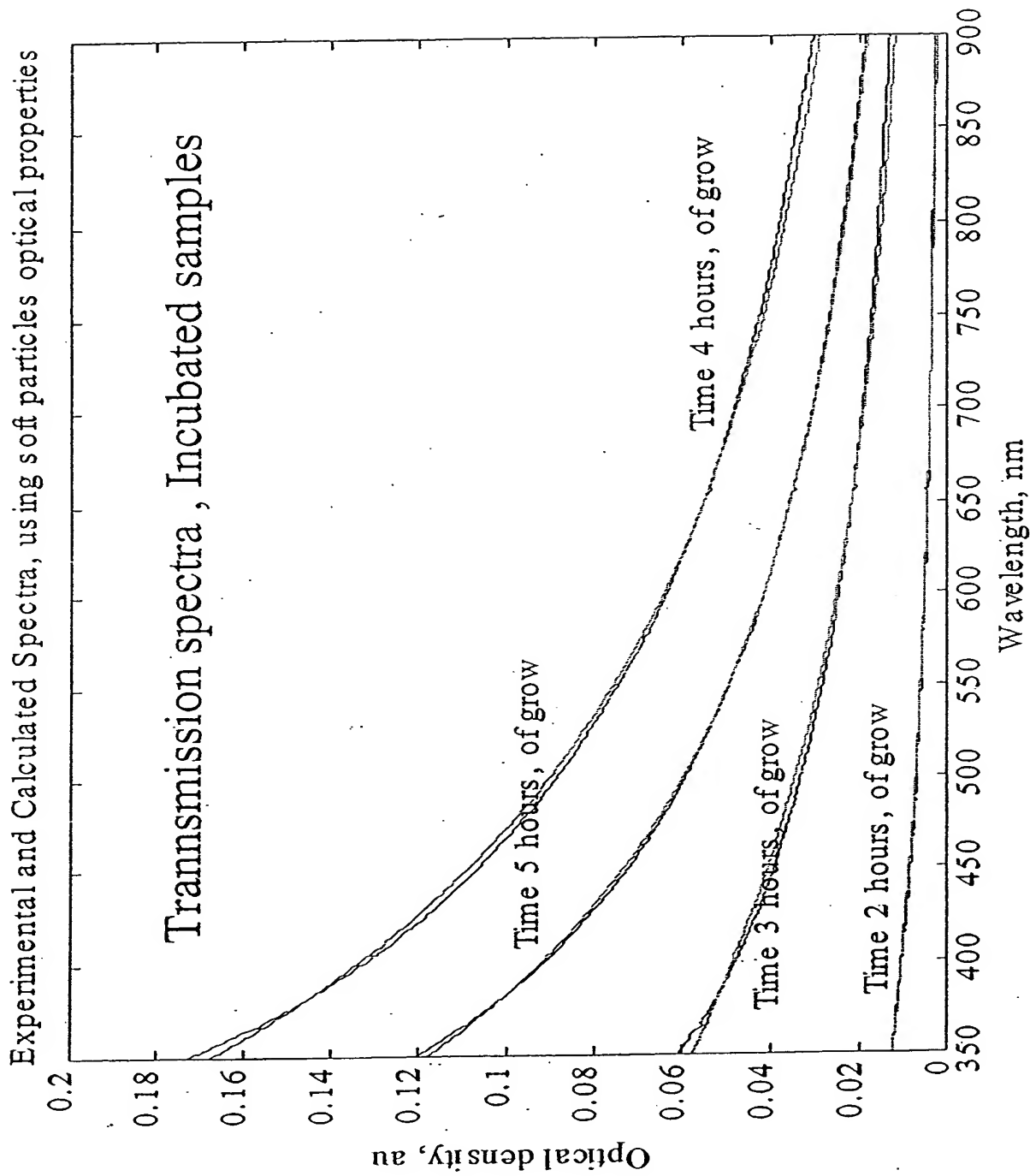


Fig. 23